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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

ATTY.'S DOCKET: FISCHER=23

In re Application of:	) Art Unit: 1621
	)
Bilha FISCHER et al.	) Examiner: Not Yet Known
	)
Appln. No.: 10/588,074	) Washington, D.C.
	)
Filed: July 31, 2006	) Confirmation No.: 1416
	)
For: INORGANIC BORANOPHOSPHATE	) April 24, 2007
SALTS	)

**INFORMATION DISCLOSURE STATEMENT [IDS]**

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U.S. Patent and Trademark Office  
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Sir :

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1. This IDS should be considered, in accordance with 37 CFR §1.97, as it is filed before the mailing date of a first office action on the merits.

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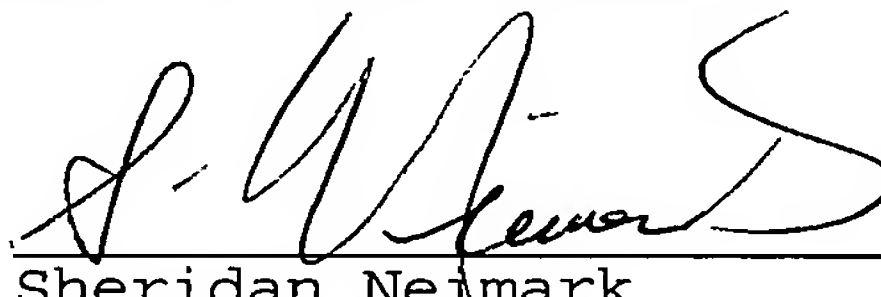
3. No explanation of relevance is necessary for documents in the English language (see reply to Comments 67 and 68 in the preamble to the final rules; 1135 OG 13 at 20).

4. In accordance with 37 CFR §§1.97(g) and (h), the filing of this IDS should not be construed as a representation that a search has been made or that information cited is, or is considered to be, material to patentability as defined in §1.56 (b), or that any cited document listed or attached is (or constitutes) prior art. Unless otherwise indicated, the date of publication indicated for an item is taken from the face of the item and Applicant(s) reserves the right to prove that the date of publication is in fact different.

Respectfully submitted,

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Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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of

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**Complete if Known**

Application Number	10/588,074
Filing Date	July 31, 2006
First Named Inventor	Bilha FISCHER
Group Art Unit	1621
Examiner Name	Not Yet Known
Attorney Docket Number	FISCHER=23

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	AD	US-2004/0097719	05-20-2004	AGRAWAL et al.	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
	AE	WO-2004/044136 A2	05-27-2004	ISIS PHARMACEUTICALS, INC.		

**NON PATENT LITERATURE DOCUMENTS /OTHER INFORMATION**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
	AF	Tsuneo IMAMOTO et al., "Boranophosphorylation Reagents, Dimethyl Boranophosphate Monopotassium Salt and Tetramethyl Boranopyrophosphate", <u>J. Am. Chem. Soc.</u> , 1997, Vol. 119, pp. 9925-9926.	
	AG	Hong LI et al., "Hydrolysis of Thymidine Boranomonophosphate and Stepwise Deuterium Substitution of the Borane Hydrogens. <sup>31</sup> P and <sup>11</sup> B NMR Studies", <u>J. Am. Chem. Soc.</u> , 1996, Vol. 118, pp. 6606-6614.	
	AH	Vladimir RAIT et al., "Boranophosphate Nucleic Acids - A versatile DNA Backbone", <u>Nucleosides &amp; Nucleotides</u> , 1999, Vol. 18. pp. 1379-1380.	
	AI	Barbara Ramsey SHAW et al., "[13] Boranophosphate Backbone: a Mimic of Phosphodiesteres, Phosphorothioates, and Methyl Phosphonates", <u>Methods in Enzymol</u> , 2000, Vol. 313, pp. 226-257.	
	AJ	Anup SOOD et al., "Boron-Containing Nucleic Acids. 2. <sup>1</sup> Synthesis of Oligodeoxynucleoside Boranophosphates", <u>J. Am. Chem. Soc.</u> , 1990, Vol. 112, pp. 9000-9001.	
	AK	Jack S. SUMMERS et al., "Structural Studies of a Borane-Modified Phosphate Diester Linkage: An Initio Calculations on the Dimethylboranophosphate Anion and the Single-Crystal X-ray Structure of Its Diisopropylammonium Salt", <u>Inorg. Chem.</u> , 1998, Vol. 37, pp. pp. 4158-4159.	
	AL	Gregory R. J. THATCHER et al., "Phosphonates as Mimics of Phosphate Biomolecules: Ab Initio Calculations on Tetrahedral Ground States and Pentacoordinate Intermediates for Phosphoryl Transfer", <u>J. Org. Chem.</u> , 1993, Vol. 58, pp. 2272-2281.	
	AM	Takeshi WADA et al., "A new boranophosphorylation reaction for the synthesis of deoxyribonucleoside boranophosphates", <u>Tet. Lett.</u> , 2002, Vol. 43, pp. 4137-4140.	
	AN	Jiancun ZHANG et al., "Synthesis and Hybridization Study of a Boranophosphate-Linked Oligothymidine Deoxynucleotide", <u>Tet. Lett.</u> , 1997, Vol. 38, No. 28, pp. 4957-4960.	

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\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kind Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.